

Appl. No. 09 / 587,270  
Amdt. Dated December 17, 2003  
Reply To Office action of September 30, 2003

Amendments to the Specification:

Please replace the Abstract section with the following rewritten abstract:

Abstract

A method for transmitting data without carrier wave, using one-cycle electromagnetic or electric impulses. Data is encoded in the transmission by modulating the impulse wavelength and optionally also the impulse position in a transmission interval. Also two different methods for receiving such impulses. The other amplifies the received impulse in multiple reception channels with AC impulses having different modulation states, the most intense amplified impulse is then filtered to find out the correct modulation state of the received impulse. The other measures the time difference between the positive and negative amplitude maximums of the AC equivalent of the received impulse to find out its correct wavelength modulation state. Also a method for organizing wireless communication traffic that uses presented transmission method, where different impulse wavelengths are allocated for different use.